# Montana Sedimentary Plains (13,828,142 acres)



Figure 24. Montana Sedimentary Plains Focus Area

The gently sloping to rolling Montana Sedimentary Plains area contains scattered buttes and badlands. It sits on heavy clay soils and consists of mostly dry shrublands and mixed-grass prairies. It receives very little precipitation and is interspersed with woody draws that contain ponderosa pine, juniper, and snowberry. Agricultural practices can be found throughout the area that support many dryland native wildlife species such as antelope, mule deer, and greater sage-grouse.

### **Landscape Characteristics**

This area includes plains and hills formed in residuum and alluvium from shale and sandstone. Some lacustrine sediments also occur. Elevations range from 2,100 to 4,150 feet. Drainage density is moderate. Mean annual precipitation ranges from 10 to 14 inches, with about 30 percent falling as snow. Soil temperature and moisture regimes are frigid and ardic ustic. The primary natural disturbances are fire and drought. Other important natural biotic disturbances include beaver activity in riparian areas and prairie dog complexes in grassland areas. Land use is predominantly livestock grazing with a small amount of dryland farming. The breakdown for land stewardship in the Montana Sedimentary Plains area is as follows:

U.S. Federal Agencies: 1,617,799 acres, or 11.7% of total area, which include:

BLM: 1,414,184 acres, or 10.2% of total area

USFS: 134,240 acres, or 1% of total area

USFWS: 10,934 acres, or less than 0.1% of total area NPS: 680 acres, or less than 0.1% of total area

State Agencies: 792,405 acres, or 5.7% of total area

Tribal Lands: 566,427 acres, or 4.1% of total area 10,822,908 acres, or 78.3% of total area County and City: 1,050 acres, or less than 0.1% of total area

### **Associated Habitats**

Habitat	Habitat Tier	Percentage of Area
Xeric Shrub Grassland Associations	I	2.31
Moderate/High Cover Grasslands	I	2.42
Very Low Cover Grasslands	I	2.71
Agricultural Lands - Irrigated	III	2.86
Ponderosa Pine	II	4.52
Wetland and Riparian	l	4.64
Badlands	II	4.66
Sagebrush	I	6.77
Agricultural Lands - Dry	III	9.06
Mixed Xeric Shrubs	l	10.47
Low/Moderate Cover Grasslands	l	41.13

Note: A total of 91.54% of the Montana Sedimentary Plains area is represented; 8.46% is made up of a combination of other habitat types.

# **Associated Species of Greatest Conservation Need (Tier I Species)**

There are a total of 346 terrestrial vertebrate species that are found within the Montana Sedimentary Plains Focus Area. Tier I species are listed below. All associations can be found in Table 28.

**Amphibians:** Northern Leopard Frog

**Reptiles:** Snapping Turtle, Spiny Softshell, Western Hog-nosed Snake, and Milksnake

**Birds:** Common Loon, Bald Eagle, Greater Sage-Grouse, Whooping Crane, Mountain Plover, Long-billed Curlew, Interior Least Tern, Black Tern, and Burrowing Owl

**Mammals:** Spotted Bat, Townsend's Big-eared Bat, Black-tailed Prairie Dog, Meadow Jumping Mouse, Black-footed Ferret, Canada Lynx, and American Bison

## **Conservation Concerns & Strategies**

Conservation Concerns	Conservation Strategies	
Loss of habitat as a result of	Policy-based approaches that	
conversion of native prairie to	encourage the conservation of natural	
agriculture	communities, rather than support their	
	conversion	
	Support public and private	
	conservation programs/activities that	
	encourage and support private land	
	use stewardship	
	Increased cooperative efforts to	
	maintain ecological features or	
	processes on public, private, and tribal	
	lands	
Fragmentation of habitat due to fossil	Education and research on fossil fuel	
fuel exploration and development	development and its impacts on natural	
activities	landscape	
	Work with corporations, land owners	
	and other agencies to reduce impacts	
	of exploration	
Invasive or exotic plant species	Cooperative efforts to reduce the	
	abundance of exotic plant species	
Range or forest management practices	Support government and private	
	conservation activities that encourage	
	and support sustainable land	
	management practices (example; rest	
Ctroomoido rooidontial dovalanment	and rotation schedules)	
Streamside residential development	Develop statewide riparian best	
Diamentian of natural distants as	management principles	
Disruption of natural disturbance	Work with other agencies, tribes and	
processes, especially fire	private organizations to restore the	
	natural disturbance processes	

### References

The Nature Conservancy. 2005. Unpublished report.

The Nature Conservancy. 1999. Ecoregional Conservation in the Northern Great Plains Steppe. Northern Great Plains Steppe Ecoregional Planning Team.76 pp.

U.S. Fish and Wildlife Service. 2004. Conservation Focus Areas of the Great Divide: a vast region encompassing the Upper Missouri, Yellowstone and upper Columbia watersheds. Publisher: USFWS, Benton Lake Wildlife Refuge, Great Falls, MT. 77 pp.